9. (Amended) The bone implant as claimed in claim 7, wherein the ions incorporated into the surface of the bone implant are from one or more of the groups of the periodic table consisting of groups IIA, VIIB, IIB, IVA AND VIIA.

10. (Amended) The bone implant as claimed in any one of the preceding claims, wherein the ions comprise magnesium, manganese, zinc or silicon ions.

11. (Amended) The bone implant as claimed in any one of the preceding claims comprising a body portion coated with a bioactive material coating.

12. (Amended) The bone implant as claimed in claim 11, wherein the body portion is formed of a metal or a metal alloy.

13. (Amended) The bone implant as claimed in any one of claims 1 to 10, wherein the bone implant substantially comprises a bioactive material.

14. (Amended) The bone implant as claimed in claim 13, wherein the bone implant is in granular form.

20. (Amended) The method as claimed in any one of claim 15, wherein the ions are present at between $1 \times 10^{10}$ and $1x\ 10^{18}$ ions per $cm^2$ of the implant surface.

21. (Amended) The method as claimed in any one of claim 15, wherein the ions comprise one or more of the following:

magnesium, calcium, strontium, titanium, chromium, manganese, iron, copper, zinc, silicon and fluorine ions.

Kindly add new claims 25 and 26 as follows:

25. (New) A bone implant having a surface comprising a bioactive material, wherein:

(a) the bioactive material has incorporated therein ions from one or more of the groups of the periodic table consisting of groups IIA, IVA, VIIA AND transition elements;

(b) the ions are incorporated into the surface atomic layers of the bone implant up to a maximum depth of 200 nm by ion beam implantation or cathodic arc deposition; and

(c) the bioactive material is a material that is capable of promoting bone growth onto the bone implant.

26. (New) The bone implant of claim 12 wherein the metal or metal alloy is titanium or titanium alloy.

## REMARKS

Entry of the foregoing amendments, reconsideration and re-examination of the subject application, pursuant to and consistent with 37 C.F.R. §1.112, and in light of the remarks which follow are respectfully requested.

By the present amendments, claims 6-14 and 21-22 are amended to overcome formal issues and claim 25 is added which combines the features of claims 1 and 3.

Turning now to the Office Action, claims 1-14 and 20-24 stand rejected under 35 U.S.C. §112 second paragraph. The rejections are respectfully traversed in part.

The rejection of claims 20 and 21 is overcome as the dependency has been changed.

The objection to claim 12 is overcome as this claims has been amended to delete "preferably a titanium alloy" and new claim 26 has been added which now contains this limitation.

The objection to claims 6-14 is overcome as "A bone" is change to --The bone—as suggested by the Examiner.

The objection to claim 1, however is respectfully traversed. With regard to this claim, the Examiner object to the phrase "the ions are incorporated into or onto the surface of the bone implant by ion beam implantation or cathodic arc deposition". The Examiner points out that as a general rule, a product claim lacks clarity if it is described by the process of making rather than in structural terms and the structure is incapable of description in structural terms.